Natural Community FIELD FORM INSTRUCTIONS

Modified for **Massachusetts** by Patricia Swain, MNHESP May 10, 2001

from a 1991 draft
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Division of Fisheries and Wildlife Rt. 135 Westborough, MA 01581 Field forms were designed to standardize data collection. We have divided the community data into categories, and designed separate forms with different purposes:

COMMUNITY FORM 1: TRANSECT, SITE SURVEY SUMMARY: use this form for reconnaissance, for a new site that is essentially unknown from community description perspective. Use this form to try to "make sense" of the landform: where are the communities in relation to changes in topography? What are the communities? What are the boundaries? For sites that are degraded (obvious C and D ranked community occurrences for which no further activity is planned), this may be the only community form that you will complete. It will serve as a record of the visit and provide some community data, but probably will not be mapped or entered into the database of Priority and Exemplary Communities. Iinformation on low quality community occurrences may be entered into a secondary community database to be tracked for a record of the sites. Form 1 is useful for recording general information along transects, with notes taken when communities change.

FORM 2: NATURAL COMMUNITY SUMMARY AND RANKING form: use to record information on the community location and rank. The natural community will be a part of a property or site: a bog, a hemlock ravine, an isolated stretch of floodplain forest are all communities. Single Form2s may have several plot forms with them. Form 2 is used to assign a rank (element occurrence rank); generally for A or B-ranked occurrences, or best known occurrences (C- or D- ranked common communities for which no pristine examples occur). Explain the basis of your ranking: range wide, state wide, or locally. These ranks are meant to apply state wide: if you are only familiar with the community in part of the state, give it a relative rank, but give your area of comparison. If you are giving it a global rank say so clearly. The assumption is that some protection activity is planned for this occurrence, so contains ownership information and other miscellaneous information that will assist in initiating protection activity. This form will also contain basic information regarding management needs of the community element: burning, exclosures, etc. This form can also be used as a record of subsequent visits, as an update form.

FORM 3, BASIC VEGETATION AND HABITAT INFORMATION: This form is to report plots, usually done in the best occurrences of community types. There can be several Forms 3 for any given community occurrence. This form contains all the basic information fields needed for minimum documentation of community occurrences. The sampling method is the relevé, which appears to be a reasonable compromise between the community "species list" and the more detailed plot techniques (e.g. macro-plots). Relevés are circular, square, or rectangular plots placed in the most representative portion of the community occurrence (but placement within this area should be random). Plots in most cases are not permanently marked (but semi-permanent markers may be used if a return visit is anticipated). Plots may be measured with a tape, but if you are familiar with your pace length, you may simply pace the distance and flag the corners. Identify what size and shape plot were used.

A given community occurrence may have several plots. All the information on Form 3 pertains to the <u>plot</u>. If more than one plot is taken (large community occurrences may require more than one plot), use a new sheet for each plot. Each should be labeled carefully to associate it with other form 3s and with its form 2. Make sure each plot can be identified if the pieces of paper get separated. Each set of forms needs a map associated with it to locate the plots and the community.

Filling out Form 3. Follow these instructions as much as possible. There is a lot of information requested, and you may not be able to supply it all. Soil information is helpful, but requires equipment you may not have with you. Do what you can, balancing information acquisition with time available. General descriptions are very useful.

All forms submitted to NHESP will be photocopied. Interns may transcribe them. You need to be neat and clear. Pencil doesn't photocopy well. Your data is valuable – help us make is useful by being legible!

Form 1 Reconnaissance

A. Identifiers:

- 1) Site Name "Official" name. Leave blank if you don't know it.
- 2) **Survey Site Name** provisional name assigned by field worker; should represent an identifiable feature on topographic map.
 - 3) **Quad name(s)** USGS quadrangle map name and scale. Note if these are the double or single map(s).
 - 4) Quad code(s) number assigned by MNHESP. Leave blank if you don't know it.
 - 5) County appropriate name from topographic map.
 - **6) County Code** assigned by MNHESP, leave blank.
 - 7) **Town** appropriate name from topographic map.
- **8) Directions** from an easily identified road or other location. Include parking information if useful. these should be precise directions in words; attach a map if appropriate
- 9) Source Code -appropriate code, assigned by MNHESP. Put it and your name on copies of the form before photocopying. The pattern is eight characters with F (for field) 01 (for year), first three letters of your last name then 0X (tie breaker, we assign it). All the records for one year for any one person have the same source code. For example, all Pat Swain's field records for 2001 are F01SWA01. (NOT the same directions as in the NY State instructions).
 - 10) Survey Date year, month, day. Date of survey
 - 11) State: use postal codes for the state
- **12**) **Surveyors** names and addresses, as appropriate. Each group of surveyors will be assigned different codes B. Topography:
 - **13) Transect** a sequence number for identifying location.
 - 14) Reconnaissance Diagram diagrammatic cross section or toposequence showing changes in elevation and corresponding changes in vegetation and soils. Mark each observation point and releve location on the diagram. (Corresponding brief descriptions for each point are given in part C). Use arrow to show compass direction and indicate approximate elevation changes and distance covered in meters. Indicate scale using ruler or stick figure.
- C. Vegetation/Habitat Observations:
 - 16) Community name state or regional vegetation name, if known; provisional name may also be assigned.
 - 17) Additional data state whether site and/or Form 3 were completed for this observation point.
 - **18) General Description** briefly describe the community or feature with the physiognomy and three dominant species of each stratum. If form 3 was filled out, omit, and write "see form 3".

Form 2: Natural Community Summary and Ranking:

Always include a copy of the appropriate USGS topographic map with this form, with the community and any transects shown.

- 1) Community Name name of the community from the draft classification.
- 2) TNC/NVCS Association Name an optional field for those working with the National Classification.
- 3) Survey Date Date the field work was done.
- 4) Today's Date Date the form is filled out.
- 5) Survey site name Provisional name of the site, usually named after a geographic feature.
- **6)** Surveyors name(s) give the main surveyors name first. Add addresses if appropriate.
- 7) Best Source themost complete survey. Leave blank if unknown.
- 8) Transcriber leave blank, NHESP use only.
- 9) USGS Topo Quad Name name of quad used, say if old single or more recent double map.
- 10) Town official town the site is in, not local village
- 11) Directions to the site from an easily identified road or other location. Include parking information if useful. Give precise directions in words; attach map if appropriate. Use clear sentences that will be understandable to someone who is unfamiliar with the area and has only your directions to follow. Give distances as closely as possible and use compass directions. Give additional directions to the plot within the site.
 - **12) GPS point(s)** yes or no, and supply if taken.
 - 13) Vegetation Description formal description of the site with list of key species and community structure.
- **14) Physical Description** Give a word picture of the area, including a general description of the vegetation and the landscape. Describe the setting for the site, including whether there is surrounding conservation land, highways, or development.
 - 15) Is community within a managed conservatin area: name if possible, also if private, public, and owner.
- **16) Disturbances/Threats/Management** as described on the form. Generally, threats and evidences of disturbances are from observations while in the field or from information gained from knowledgeable sources. These may lead to management recommendations as appropriate
 - 17) **Protection comments -** to be filled out if the information is known..
- **18) General Comments** notes on sampling techniques, other forms filled out, and other information gathered or needed. Note if photographs were taken and are available.
 - 19) Owner information leave blank if not known

Community Element Occurrence Ranking

These fields are very important, fill out the parts you are comfortable with. Use the comment fields. In the comments field state what the comparisons are to: is this a property, region, state, or range wide assessment? Comment on size, exotics, management possibilities, position in the landscape, ownership or other useful criteria. MNHESP does have draft technical criterea for ranks which will be made available with the 2001 interim draft of the Classification of natural communities.

Form 3 Habitat/Vegetation Description

A. Identifiers:

- 1) SName State name of the community type. Provisional name assigned by field worker
- 2) Gname Formal name of community type.
- 3) Site Name "Official" name. Leave blank if you don't know it.
- **4) Survey Site Name** provisional name assigned by field worker; should represent an identifiable feature on topographic map.
- 5) Quad name(s) USGS quadrangle map name and scale. Note if these are the double or single map(s).
- 6) Quad code(s) number assigned by MNHESP. Leave blank if you don't know it.
- 7) County appropriate name from topographic map.
- 8) County Code assigned by MNHESP, leave blank.
- 9) Town appropriate name from topographic map.
- 10) Lat. latitude in degrees, minutes, and seconds. Do not estimate, NHESP will do unless a GPS is used.
- 11) Long. longitude as above in 10).
- 12) Directions from an easily identified road or other location. Include parking information if useful. Give precise directions in words; attach map if appropriate. Use clear sentences that will be understandable to someone who is unfamiliar with the area and has only your directions to follow. Give distances as closely as possible and use compass directions. Give additional directions to the plot within the site.
- 13) Source Code -appropriate code, assigned by MNHESP. Put it and your name on copies of the form before photocopying. The pattern is eight characters with F (for field) 98 (for year), first three letters of your last name then 01 (tie breaker, we assign it). All the records for one year for any one person have the same source code. For example, all Pat Swain's field records from 1998 will be/are F98SWA01. NOT the same directions as in the NY State instructions.
 - **14) Survey Date** year, month, day. Date of survey.
 - 15) Last obs May be the same as the survey date, but could be an update without data collection.
 - 16) First obs the first time the site was visited. May be years before, may only be known to the year.
 - 17) State State where community occurrence is located.
 - **18**) **Surveyors** names and addresses, as appropriate. List principle surveyor first.
- B. Environmental Description (Topography):
 - **19) Reconnaissance ID** observation point number, if indicated on Form 1.
 - **20**) **Image annotation** # patch identifier if noted on aerial photographs.
 - **21**) **Elevation** elevation of the plot, in feet or meters, label which.
 - 22) Topographic position topographic position of the community in the landscape, check off.
- **23) Topographic sketch.** make a topographical sketch and indicate position of plot. Use arrow to show compass direction and indicate approximate elevation changes in meters.
- **24) Slope degrees** measure slope using a clinometer or describe: flat, gentle, moderate, somewhat steep, steep, very steep, abrupt, overhanging.
- **25) Slope Aspect** use a compass and be sure to correct for the magnetic declination. Or describe: flat, variable, N, NE, E, SE, S, SW, W, or NW.
- **26) Parent Material/Bedrock** note the geologic substrate influencing the plant community (bedrock or surficial materials.)

Igneous Rocks

Granitic (Granite, Schyolite, Syenite, Trachyte) Dioritic (Diorite, Dacite, Andesite) Gabbroic (Gabbro, Basalt, Pyroxenite, Peridotite)

26) Parent Material/Bedrock - continued

Sedimentary Rocks Metamorphic Rocks Conglomerates and Breccias Gneiss Sandstone Schist Siltstone Slate and Phyllite Shale Marble Limestone and Dolomite Serpentine Marl Gypsum Glacial deposits: undifferentiated glacial deposit

moraine

bedrock and till

Glacio-fluvial deposits (outwash plains, ice-contacted GF deposits, eskers, kames, pro-glacial deltas, etc.)

Deltaic deposits (alluvial cones, deltaic complexes)

Lacustrine and fluvial deposits (glacio-fluvial, fluvio-lacustrine, freshwater sandy beaches, stony/gravelly shore)

Marine deposits (bars, spits, sandy beaches, old shorelines, old beach ridges, old marine clays, etc.)

Organic deposits:

Peat (with clear fibric structure)

Muck

Marsh, regularly flooded by lake or river (high mineral content)

Slope and modified deposits:

talus and scree slopes

colluvial

solifluction, landslide

Aeolian deposits:

dunes

aeolian sand flats

loess deposits

cover sands

27) Soil Profile Description - Using a shovel with a long narrow blade or a soil auger, dig a pit 2-3 feet deep and note depth, texture, and color (Munsell color chart) of each horizon. Sketch the soil profile representative of the plot. In the sketch indicate depth scale (cm) on left side of profile, horizon designation on right side, boundary characteristics in drawing, and additional information on texture, structure, color, etc. as appropriate.

Simplified Key to Texture (Brewer & McCann, 1982)

- A1 Soil does not remain in a ball when squeezed. sand
- B Squeeze the ball between your thumb and forefinger, attempting to make a ribbon that you push up over your finger. B1 Soil makes no ribbon. loamy sand

- C1 Ribbon extends less than 1 inch before breaking D
- C2 Ribbon extends 1 inch or more before breaking E
- D1 Add excess water to small amount of soil; soil feels at least slightly gritty loam or sandy loam

- F1 Add excess water to small amount of soil; soil feels at least slightly gritty......sandy clay loam or clay loam
- F2 Soil feels smooth silty clay loam or silt
- G1 Add excess water to a small amount of soil; soil feels at least slightly gritty sandy clay or clay
- G2 Soil feels smooth.....silty clay

VON POST SCALE OF PEAT DECOMPOSITION

- H1: Completely undecomposed peat; only clear water can be squeezed out.
- H2: Almost undecomposed and mud-free peat; water that is squeezed out is almost clear and colorless.
- H3: Very little decomposed and very slightly muddy peat; when squeezed water is obviously muddy but no peat passes through fingers. Residue retains structure of peat.
- H4: Poorly decomposed and somewhat muddy peat; when squeezed, water is muddy. Residue muddy but it clearly shows growth structure of peat.
- H5: Somewhat decomposed, rather muddy peat; growth structure visible but somewhat indistinct; when squeezed some peat passes through fingers but mostly very muddy water. Press residue muddy.

- H6: Somewhat decomposed, rather muddy peat; growth structure indistinct; less than 1/2 of peat passes through fingers when squeezed. Residue very muddy, but growth structure more obvious than in unpressed peat.
- H7: Rather well-decomposed, very muddy peat; growth structure visible, about 1/2 of peat squeezed through fingers. <u>If</u> water is squeezed out, it is porridge-like.
- H8: Well-decomposed peat; growth structure very indistinct; about 2/3 of peat passes through fingers when pressed, and sometimes a somewhat porridge-like liquid. Residue consist mainly of roots and resistant fibers.
- H9: Almost completely decomposed and mud-like peat; almost no growth structure visible. Almost all peat passes through fingers as a homogeneous porridge if pressed.
- H10: Completely decomposed and muddy peat; no growth structure visible; entire peat mass can be squeezed through fingers.
 - 28) Organic horizon depth Indicate depth to contact with mineral soil or mixture of organic and mineral soil (O horizon)

29) Organic horizon type -

MOR - acid reaction. lacking in microbial activity except fungi, and composed of several layers of organic matter in varying degrees of decomposition.

MULL - chemically neutral or alkaline reaction; well aerated, and provides generally favorable conditions for decomposition of organic matter. Well decomposed and intimately mixed with mineral matter.

- 30) Average pH of mineral soil measure pH of mineral soil.
- 31) Moisture Regime while soil drainage is based on soil morphology only, moisture regime is based on the amount of water available to plants. It is evaluated on the basis of soil drainage, soil structure and texture, and climate. Thus, a well-drained till is much more moist than a well-drained coarse textured glacio-fluvial deposit within the same area, or a well-drained sandy loam in a humid climate is moister than the same soil in a climatically dry region.

EXTREMELY DRY: steep eroding sands, rock piles, gravel.

VERY DRY: medium and coarse sands: shallow soils, not influenced by ground water.

DRY: deep silty sands and loamy sands, not influenced by ground water.

WELL-DRAINED: deep sandy loams and loams, not influenced by ground water.

SOMEWHAT MOIST: loams and sandy loams with some rust mottling in lower part of B or C horizon. Moist variants or zonal soil types.

MOIST: soil surface above the maximum water level; normal soil profile development hampered because of imperfect drainage. Upper 1-2 feet of soil well-aerated during vegetative season. On mineral soils a severely

mottled to homogeneous brown horizon (color B) is present. Occurs also on heavy textured soils with perched water table and on dry deep peat.

SOMEWHAT WET: maximum water level at or close to the soil surface. Anaerobic soils; on mineral soils reduced, grey soil matrix with rust mottling. Gleysols, some peat soils.

WET: water level at soil surface for most of vegetative season. Reduced gley layer up to mineral soil surface on mineral soils; mottling usually absent or insignificant. Organic soil, gleysol

VERY WET: water level above soil surface for most part of vegetative season. Minimum water level approximately at soil surface. Organic soil.

PERMANENTLY INUNDATED: (hydric) minimum water level above soil surface, soils permanently inundated.

PERIODICALLY INUNDATED: (hydric) known to be periodically inundated due to flood/drought cycles or other variable moisture regimes.

- 32) Stoniness average stoniness of deposit up to 1 m in depth, check off...
- **33) Soil Drainage** The soil drainage classes are defined in terms of (1) actual moisture content (in excess of field moisture capacity), and (2) the extent of the period during which excess water is present in the plant-root zone.

It is recognized that permeability, level of groundwater, and seepage are factors affecting moisture status. However, because these are not easily observed or measured in the field, they cannot be used generally as criteria of moisture status. It is further recognized that soil profile morphology, for example mottling, normally, but not always, reflects soil moisture status. Although soil morphology may be a valuable field indication of moisture status, it should not be the overriding criterion. Soil drainage classes cannot be based solely on the presence or absence of mottling. Topographic position and vegetation as well as soil morphology are useful field criteria for assessing soil moisture status.

- RAPIDLY DRAINED The soil moisture content <u>seldom exceeds field capacity</u> in any horizon except immediately after water addition. Soils are free from any evidence of gleying throughout the profile. Rapidly drained soils are commonly <u>coarse textured or soils on steep slopes</u>.
- WELL DRAINED The soil moisture content does not normally exceed field capacity in any horizon (except possibly the C) for a significant part of the year. Soils are usually free from mottling in the upper 3 feet, but may be mottled below this depth. B horizons, if present, are reddish, brownish, or yellowish.
- MODERATELY WELL DRAINED The soil moisture in excess of field capacity remains for a small but significant period of the year, are commonly mottled in the lower B and C horizons or below a depth of 2 feet. The Ae horizon, if present, may be faintly mottled in fine-textured soils and in medium-textured soils that have a slowly permeable layer below the solum. In grassland soils the B and C horizons may be only faintly mottled and the A horizon may be relatively thick and dark, excess of field capacity remains in subsurface horizons for moderately long periods during the year, are commonly mottled in the B and C horizons; the Ae horizon, if present, may be mottled. The matrix generally has a lower chroma than in the well-drained soil on similar parent material.
- SOMEWHAT POORLY DRAINED The soil moisture in excess of field capacity remains in subsurface horizons for moderately long periods during the year. Soils are commonly mottled in the B and C horizons; the Ae horizon, if present, may be mottled. The matrix generally has a lower chroma than in the well-drained soil on similar parent material.
- POORLY DRAINED The soil moisture in excess of field capacity remains in all horizons for a large part of the year. The soils are usually very strongly gleyed. Except in high-chroma parent materials the B, if present, and upper C horizons usually have matrix colors of low chroma. Faint mottling may occur throughout.
- VERY POORLY DRAINED Free water remains at or within 12 inches of the surface most of the year. The soils are usually very strongly gleyed. Subsurface horizons usually are of low chroma and yellowish to bluish hues. Mottling may be present but at depth in the profile. Very poorly drained soils usually have a mucky or peaty surface horizon.
- **34)** Average Texture overall texture of upper 1 m of loose deposit. Given in #27.
 - MUCK: Dark colored, finely divided, well decomposed organic soil material mixed with mineral soil material. The content of organic matter is more than 20%.
 - PEAT: Unconsolidated material, largely undecomposed organic matter, that has accumulated under excess moisture.
 - For Peat deposits use Von Post scale of peat decomposition given in #27.
- **35) Unvegetated surface -** Percentage of surface covered by each category, only including items covering more than 5%.
- **36) Environmental comments** Additional observations about the plot. Note whether vegetation is homogeneous or made up of distinct units (e.g. hummocks and hollows); evidence of erosion or sedimentation; further observations on inundation, etc.
- **37**) **Plot representativeness -** Does this plot represent the full variability of the community occurrence? In not, were additional plots done: Note additional species not in plot (use back in separate area if necessary).
- C. Environmental Description (Vegetation): (Back of form)
 - ADD Community Name -. vegetation type name used in state classification.

Plot number, for correlating with site forms and other plots.

Give Plot dimensions used: width and length dimensions for rectangular (or square) plots or radius for circular plots. Choose the appropriate plot size based on the appropriate vegetation. Mueller-Dombois and Ellenberg, 1974, (Source: D. Mueller-Dombois and H. Ellenberg. 1974. Aims and Methods of Vegetation Ecology. John Wiley and Sons. NY.) recommend:

Forest $200 - 500 \text{ m}^2$ Dwarf-shrub heath: $10 - 25 \text{ m}^2$ Shrubland $50 - 200 \text{ m}^2$ Moss communities $1 - 4 \text{ m}^2$ Grassland $50 - 200 \text{ m}^2$ Lichen communities $0.1 - 1 \text{ m}^2$

Square, short rectangular, or circular plots are preferred whenever feasible. Because there is a greater potential for edge effects or patchiness in long rectangular plots, use them only when needed to fit in a narrow zone.

41) Leaf type - Select one which best describes the leaf form of the tallest stratum with at least 25% cover..

Climbers (lianas) Epiphytes

42) Leaf phenology - Select the type of leaf structure for the dominant stratum with greater then 25% cover.

Perennial - is herbaceous vegetation composed of more than 50% perennial species. Annual - Herbaceous vegetation composed of more than 50% annual species.

- **43) Physiognomic type** -Select the description that best describes the community structure...
- 44) Strata / life forms Visually divide the community into vegetation layers. Indicate the height of the stratum in the first column, and average percent cover of the whole stratum in the second column.
- 45) Releve Data list all species and their abundance/cover classes for each stratum, beginning with the tallest. Separate each stratum with a blank line. On the first line of each stratum, record the stratum code (OR Kuchler code), with its total percent cover. Species outside the plot should be listed in parentheses and not counted in the total number of species used in tabular comparison. For tree strata, include diameters (DBH) of several (or all, say which) of the (largest) trees in the plot. IF YOU USE A DIFFERENT APPROACH, MAKE IT VERY CLEAR WHAT YOU HAVE DONE.

Braun-Blanquet

Cover/abundance values: Sociability scale: r one or few individuals 1 growing solitarily, singly 2 small groups, small tussocks + occasional, < 5% cover 1 common, < 5% cover 3 small patches, large tussocks 2- 5-12% cover 4 large patches, mats 2+ 13-25% cover 5 great crowds, mats covering whole plot 3 26-50% cover 4 51-75% cover 5 > 75% cover

Kuchler Height Classes

Life form Categories

Woody Plants		Herbaceous Plants		Special Life Forms	
В	Broadleaf evergreen	G	Graminoids	C	Climbers (lia
D	Broadleaf deciduous	Н	Forbs	X	Epiphytes
E	Needleleaf evergreen	L	Lichens, mosses		
N	Needlaleaf deciduous				
S	Semideciduous (B+D)				
M	Mixed (D+E)				
Struc	ctural Categories				
Height (stratification)		Cove	Coverage (of the layer)		
8	>35m	c	continuous (>75%)		

i

p

7 20 - 35m 6 10 -20m 5 5 - 10m 4 2 - 5m 3 0..5 - 2m

- 2 0.1- 0.5m (knee high) <0.1m (ankle high)
- rare (5 25%) r b barely present, sporadic (1-5%)

interrupted (50 - 75%) parklike, patches (25 - 50%)

an alternative to the protocol on the back of form 3

almost absent, scarce, (<1%)

Protocol for Community forms (form 3, back) January 19, 1996, P. Swain Using relevé procedures.

Plot sizes vary with the community--generally 20 x 20m or 10 x10m for forest. If necessary subplots can be nested for different layers (5x5m for shrubs, several 1x1m for herbaceous)--label clearly whatever is done.

NOTE: TNC recommends using actual estimated coverages instead of cover classes. If doing that be consistent, and clearly explain what you have done.

Kuchler height class

Species name1 Braun-Blanquet's code notes (cover . sociability) Species name2 Braun-Blanquet's code notes (cover . sociability)

for example: (some people use abbreviations for species in notes, Acsa or Quru

Acer saccharum 3.1 dbh to 10" Quercus rubra 1.1 dbh to 8" +.1 dbh to 6" Acer rubrum

Fraxinus americana 1.1 dbh to 8", one dead stem

M₅p

Tsuga canadensis 2.2 Sassafras albidum +.1+.2Betula papyrifera Cornus ammomum 1.2 Viburnum lentago +.1

H2-3c (There's a choice here--call entire layer H and list small Ds and Gs, or separate each growth form. Purists probably separate. I tend to name the layer by appearance, so if grassy looking its G, even if has Hs or if broadleafed herb-y looking its H but includes woody and grassy. Tends to be a long section.)

Aster infirmus +.1 (fl) (There are Lots of +.1, s, probably most common.)

Aster paternus +.2

Viola sp 1.2 (it is best to be as precise as possible on species for the computer)

Eupatorium rugosum +.1Geum canadense +.1Osmunda cinnamomea +.2Acer rubrum +.1 Vaccinium angustifolium 2.4

(Carex stricta 3.4, area near woods, not in plot)

B1r

Mitchella repens +.2Gaultheria procumbens +.2

Note: There's flexibility here. Lump overlapping size classes (ie. D4-5r).

If its a measured plot, say so: if eye balled, say where. And so on.